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Taylor Larrechea
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MATH 360
HW Ch. 10.2
                               /1/277 2 cos(2x)cos(24)dx - 2 sin(2x) sin(29)dy
                                                   F2 = -28in(1/2x)Sin(29)
F= 4005(1/2x) cos(25)
                                                                                                            MEXEN
                 For exactness: \frac{\partial F_2}{\partial x} = \frac{\partial F_1}{\partial y}
                                                                                                            m =y ≤ 0
                          \frac{\partial F_1}{\partial x} = \frac{\partial F_1}{\partial y} = -\cos(\frac{1}{2}x)\sin(\frac{1}{2}y)
                                                                                                           [%, m] -> [m,o]
 ar = - cos (1/2x) Sin (2y)
                                                                                                              2=3-2
                                                                                                            [ 1/2+ t 1/2, 1 - t 1 ]
                                                                                                      广(t)=[%+t%, か-tか]
                  : We can say that this equation is exact.
                                                                                                     f(+)=[1/2,-8]
 广(t)=[%+t%, 8-t2]
                                                  05251
 f(+)=[1/2,-8] dt
 F=[½cos(½x)cos(2y),-25in(½x)sin(2y)]
 F(r) = [265(4(2+t2))cos(2(1-tr)),-2sin(4(2+t2))sin(2(1-tr))
F(r) = \( \frac{1}{2} \cos(\frac{1}{4} + \frac{1}{4}t) \cos(\gamma n - 2nt) \) - 2 \( \sin(\frac{1}{4} + \frac{1}{4}t) \) \( \sin(2n - 2nt) \)
  \int_{\mathcal{C}} \vec{F}(r) \cdot d\vec{r} = \int_{0}^{1} \left[ \frac{1}{2} \cos\left(\frac{\pi}{4} + \frac{\pi}{4}t\right) \cos\left(2\pi - 2\pi + 1\right), -2\sin\left(\frac{\pi}{4} + \frac{\pi}{4}t\right) \sin\left(2\pi - 2\pi + 1\right) \right] \cdot \left[\frac{\pi}{2}, -\pi\right] dt
                   = \int_{-\infty}^{\infty} \frac{\partial r}{\partial r} \cos(\frac{r}{4}(1+t)) \cos(2\pi r(1-t)) + 2\pi \sin(\frac{r}{4}(1+t)) \sin(2\pi r(1-t)) dt
                 = 1 f cos(1/4(1+6)) (05(201(1-6)) dt + 20 f sin(1/4(1+6)) sin(201(1-6)) dt
                 = My So cos(a) cos(B) dt + 28 So sin(a) sin(B) dt
\cos(\alpha)\cos(\beta) = \frac{1}{2}\left[\cos(\alpha-\beta) + \cos(\alpha+\beta)\right] \quad \sin(\alpha)\sin(\beta) = \frac{1}{2}\left[\cos(\alpha-\beta) - \cos(\alpha+\beta)\right]
     \alpha - \beta = \left[ \frac{1}{4} + \frac{1}{4} t \right] - \left[ 2 \left( \frac{1}{4} - \frac{1}{4} \right) \right] = \left[ \frac{9 \left( \frac{1}{4} t - \frac{1}{4} \right)}{4} \right] = \frac{1}{1} \left( \frac{9 t - 7}{4} \right) = \beta
   2+B = \left[\frac{1}{4} + \frac{1}{4}\right] + \left[21 - 20 + \right] = \left[\frac{9}{4} - \frac{7}{4}\right] = \underbrace{11(9 - 7t)}_{11} = \delta
               =\frac{\gamma}{8}\int_{0}^{1}\cos(\delta)dt+\frac{\gamma}{8}\int_{0}^{1}\cos(\delta)dt+\pi\int_{0}^{1}\cos(\delta)dt-\pi\int_{0}^{1}\cos(\delta)dt-\pi\int_{0}^{1}\cos(\delta)dt
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\frac{\gamma}{2}\int_{0}^{1}(\cos{(8)})dt + \frac{\gamma}{2}\int_{0}^{1}(\cos{(8)})dt + \frac{\gamma}{2}\int_{0}^{1}(\cos{(8)})dt - \frac{\gamma}{2}\int_{0}^{1}(\cos{(8)})dt
                                                                                                   dS = -\frac{7}{12} + 2t \qquad dS = \frac{9}{12} + 2t \qquad dS = -\frac{7}{12} + 2t
                    d8 = 917 ct
                     dt = \frac{4}{90} d\delta
dt = \frac{4}{90} d\delta
dt = -\frac{4}{90} d\delta
dt = -\frac{4}{90} d\delta
                    18 Jo (05(8) d8 - 4 Jo (05(8) d8 + 4/9 Jo (05(8) d8 + 4/9 Jo (05(8) d8
 \frac{1}{18} \left[ Sin\left(\frac{\widetilde{\Upsilon}(9t-7)}{4}\right) \Big|_{0}^{1} \right] - \frac{1}{14} \left[ Sin\left(\frac{\widetilde{\Upsilon}(9-7t)}{4}\right) \Big|_{0}^{1} \right] + \frac{4}{9} \left[ Sin\left(\frac{\widetilde{\Upsilon}(9-7t)}{4}\right) \Big|_{0}^{1} \right] + \frac{4}{7} \left[ Sin\left(\frac{\widetilde{\Upsilon}(9-7t)}{4}\right) \Big|_{0}^{1} \right]
  18 [Sin(1/2) - Sin(-7/4)] - 1 [Sin(1/2) - Sin(9/4)] + 4 [Sin(1/2) - Sin(-7/4)] + 4 [Sin(1/2) - Sin(9/4)]
   (1-\sqrt{2}/2)(\frac{1}{18}-\frac{1}{14}+\frac{4}{9}+\frac{4}{7})=(1-\sqrt{2}/2)(1)=0.2929\approx0.293
                                                                                                                                                                        0.293 or (1-12/2)
(17,0)
/1/2 / 2 (05 (1/2×) Cos (2y) dx - 2 Sin (1/2×) Sin (29) dy = f(1,0) - f(1/2,1)
                                  \frac{\partial F_2}{\partial x} = \frac{\partial F_1}{\partial y} : \frac{\partial F_2}{\partial x} = -\cos(\frac{1}{2}x)\sin(\frac{1}{2}y) \sqrt{\frac{2F_1}{2}} = -\cos(\frac{1}{2}x)\cos(\frac{1}{2}x)\sin(\frac{1}{2}y) \sqrt{\frac{2F_1}{2}} = -\cos(\frac{1}{2}x)\cos(\frac{1}{2}x)\cos(\frac{1}{2}x)\cos(\frac{1}{2}x)\cos(\frac{1}{2}x)\cos(\frac{1}{2}x)\cos(\frac{1}{2}x)\cos(\frac{1}{2}x)\cos(\frac{1}{2}x)\cos(\frac{1}{2}x)\cos(\frac{1}{2}x)\cos(\frac{1}{2}x)\cos(\frac{1}{2}x)\cos(\frac{1}{2}x)\cos(\frac{1}{2}x)\cos(\frac{1}{2}x)\cos(\frac{1}{2}x)\cos(\frac{1}{2}x)\cos(\frac{1}{2}x)\cos(\frac{1}{2}x)\cos(\frac{1}{2}x)\cos(\frac{1}{2}x)\cos(\frac{1}{2}x)\cos(\frac{1}{2}x)\cos(\frac{1}{2}x)\cos(\frac{1}{2}x)\cos(\frac{1}{2}x)\cos(\frac{1}{2}x)\cos(\frac{1}{2}x)\cos(\frac{1}{2}x)\cos(\frac{1}{2}x)\cos(\frac{1}{2}x)\cos(\frac{1}{2}x)\cos(\frac{1}{2}x)\cos(\frac{1}{2}x)\cos(\frac{1}{2}x)\cos(\frac{1}{2}x)\cos(\frac{1}{2}x)\cos(\frac{1}{2}x)\cos(\frac{1}{2}x)\cos(\frac{1}{2}x)\cos(\frac{1}{2}x)\cos(\frac{1}{2}x)\cos(\frac{1}{2}x)\cos(\frac{1}{2}x)\cos(\frac{1}{2}x)\cos(\frac{1}{2}x)\cos(\frac{1}{2}x)\cos(\frac{1}{2}x)\cos(\frac{1}{2}x)\cos(\frac{1}{2}x)\cos(\frac{1}{2}x)\cos(\frac{1}{2}x)\cos(\frac{1}{2}x)\cos(\frac{1}{2}x)\cos(\frac{1}{2}x)\cos(\frac{1}{2}x)\cos(\frac{1}{2}x)\cos(\frac{1}{2}x)\cos(\frac{1}{2}x)\cos(\frac{1}{2}x)\cos(\frac{1}{2}x)\cos(\frac{1}{2}x)\cos(\frac{1}{2}x)\cos(\frac{1}{2}x)\cos(\frac{1}{2}x)\cos(\frac{1}{2}x)\cos(\frac{1}{2}x)\cos(\frac{1}{2}x)\cos(\frac{1}{2}x)\cos(\frac{1}{2}x)\cos(\frac{1}{2}x)\cos(\frac{1}{2}x)\cos(\frac{1}{2}x)\cos(\frac{1}{2}x)\cos(\frac{1}{2}x)\cos(\frac{1}{2}x)\cos(\frac{1}{2}x)\cos(\frac{1}{2}x)\cos(\frac{1}{2}x)\cos(\frac{1}{2}x)\cos(\frac{1}{2}x)\cos(\frac{1}{2}x)\cos(\frac{1}{2}x)\cos(\frac{1}{2}x)\cos(\frac{1}{2}x)\cos(\frac{1}{2}x)\cos(\frac{1}{2}x)\cos(\frac{1}{2}x)\cos(\frac{1
                                                           F_x = \frac{1}{2} \cos(\frac{1}{2}x) \cos(\frac{1}{2}y)
                                                           F = Sin((x)cos(\partial y) + C(y)) = Sin((x)cos(\partial y) + Sin(\partial y))
                                           F(\widehat{\eta}, 0) = Sin(\widehat{\mathfrak{g}} \cdot \widehat{\mathfrak{h}}) \cdot (os(\widehat{\mathfrak{g}} \cdot 0) + Sin(\widehat{\mathfrak{g}} \cdot 0) = 1
                                         F($,17) = Sin($.$).cos(2.87) + Sin(2.87) = 12/2
                                                 \int (\mathcal{C}_{3}, \mathcal{C}_{3}) dx = f(b) - f(a) = [1 - \sqrt{2}/2]
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0.293 or (1. 15/2)